Executive Summary 2007-2008 Collegiate Learning Assessment at UW-La Crosse

In 2006-07 the UWL General Education Committee selected the Collegiate Learning Assessment (CLA) to assess general education student learning outcomes. UW-La Crosse administered the test in 2007-08. This summary describes the test and results for UW-La Crosse.

The CLA is designed to measure an institution's contribution, or *value added*, to the development of students' critical thinking, analytic reasoning, problem solving and written communication skills.

The CLA includes two types of testing tasks:

1. *Performance Tasks* place students in a "real-life" activity (such as preparing a memo or policy recommendation) in which they must review and evaluate information in a document library to answer questions or solve problems. Completion of a Performance Task measures students' demonstrated ability to interpret, analyze and synthesize information.

2. Analytic Writing Tasks present students with a topic or issue. They must either evaluate the issue or develop a position on the issue. These tasks evaluate students' ability to articulate complex ideas, examine claims and evidence, support ideas with relevant reasons and examples, sustain a coherent discussion, and use standard written English.

The tasks are designed to be appropriate for college students across a wide range of undergraduate academic majors and general education programs (see Appendix A: CLA Task Types).

Who took the test at UWL? One hundred twelve (112) new freshmen took the test in fall 2007 and 101 native seniors (i.e., seniors who started as freshmen at UWL) in spring 2008. The groups are representative of the freshmen and senior classes, with two exceptions. Both groups were slightly overrepresented by females (freshmen CLA group = 71% female and the senior CLA group = 68% female) compared to the percentage of eligible non-participating freshmen females (61%), and senior females (64%). In addition, the GPA's of both CLA groups are slightly higher than the GPA for eligible nonparticipating students: CLA freshmen first year mean GPA = 3.18 compared to 3.05 for eligible nonparticipants; CLA seniors GPA = 3.42 compared to 3.27 for the eligible non-participating seniors.

Results. Table 1 reports the mean Actual Scores for each CLA task and the percentile ranks for UWL freshmen and seniors. As shown the scores vary from the 59th to the 90th percentile indicating that UWL students scored well above the mean on all the CLA tasks compared to students at other institutions.

Table 1: Percentile Rank for Mean CLA Scores of UWL Students

Task	Freshmen CLA Score	Freshman Percentile Rank	Senior CLA Score	Senior Percentile Rank
Total CLA Score	1103	67	1269	86
Performance Task	1076	59	1276	85
Analytic Writing Tasks	1129	78	1262	84
Make-an-Argument	1156	82	1233	74
Critique-an-Argument	1103	69	1291	90

The CLA estimates the magnitude of growth or *value added* between freshmen and senior year. To do this, students' Actual Scores are first adjusted to take into account their academic ability as measured by ACT scores. For example, although the mean Actual CLA Score for UWL freshmen was 1103, the Expected Score, based on ACT scores, is 1116. The mean Actual CLA Score for seniors was 1276 but the Expected Score was 1218. In other words, UWL freshmen scored below and seniors scored above where they were expected to score given their ability levels.

Table 2 shows the results of computing Deviation Scores for freshmen and seniors. A Deviation Score is the difference between a student's Actual Score and the Expected Score based on ability. The table shows the percentile ranks for Deviation Scores and the performance levels. The performance level indicates whether students scored below, at, or above the expected level of performance based on their academic ability. For example, freshmen (39th percentile) were at the expected level on the test and seniors (92nd percentile) scored well above their expected level.

Table 2: Percentile Ranks for *Deviation Scores* of UWL Students

Percentile Ranks for Deviation Scores (Deviation Score = Difference between Actual Score and Expected Score)				
Task	Freshmen Percentile Rank	Performance Level	Senior Percentile Rank	Performance Level
Total CLA Score	39	At	92	Well above
Performance Task	35	At	86	Well above
Analytic Writing Tasks	51	At	89	Above
Make-an-Argument	71	Above	70	At
Critique-an-Argument	27	Below	97	Well Above

To compute *value added* Freshmen Deviation Scores are subtracted from Senior Deviation Scores. These Difference Scores are a measure of the gains students make from freshmen to senior year. Table 3 contains the percentile ranks of the Difference Scores.

The gains made by UWL students as measured by the total CLA score are in the 96th percentile. This means that the learning gains of UWL students exceeded the gains of students at 96 percent of the institutions that participated in the CLA. The gains of UWL students are in the 94th and 86th percentiles for the Performance and Analytic Writing Tasks, respectively. The only area in which the gains are not above expected levels is for the Make-an-Argument Task where the gains are at the 50th percentile.

Table 3: Value-Added Estimate for UWL

Value-Added Estimate		
Task	Percentile	Performance Level
Total CLA Score	96	Well Above Expected
Performance Task	94	Well Above Expected
Analytic Writing Task	86	Above Expected
Make-an-Argument	50	At Expected
Critique-an-Argument	98	Well Above Expected

Overall, the learning gains of UWL students are quite substantial compared to those of students from other institutions that participated in the 2007-08 CLA. The CLA Institutional Report indicates that

> The University of Wisconsin La Crosse contributes more to the learning gains made by students than 96 percent of the 176 four-year undergraduate institutions participating in the 2007–2008 CLA. University of Wisconsin La Crosse performed Well Above Expected.

Analyzing and Using CLA Results. The CLA measures the types of complex abilities at the heart of general education— critical thinking, analytic reasoning, problem solving, written communication. No single test measures all UWL General

Education learning outcomes; however, there is significant overlap between what the CLA measures and what we purport to teach in general education. The test can help us assess the impact of changes in the curricula and allows us to compare the performance of UWL to other institutions.

While the General Education Committee has not had an opportunity to analyze the CLA, one way to examine results is to compare differences across the different CLA tasks. The gains on Performance and Critique-an-Argument tasks are both above the 90th percentile. The Make-an-Argument Task gains are at the 50th percentile, a respectable achievement but substantially below the other tasks. What accounts for this difference? It might be useful to examine the different types of skills used for the tasks (e.g., see Appendix B: Combinations of Skills Used on CLA Tasks) and how these are taught across the general education curriculum. Another question to explore is why freshmen scored so much higher on the Make-an-Argument than on the other tasks, and why seniors scored lower on this task compared to the other tasks.

Used in combination with other forms of assessment the CLA can be part of a comprehensive plan to evaluate and improve student learning in general education. For example, CLA results could be compared with the results of the 2008-09 course embedded assessment which will provide evidence about student achievement of specific general education learning outcomes. In addition, UWL administers the National Survey of Student Engagement (NSSE) on a regular basis, which can provide information about student involvement in academic and co-curricular activities that may be linked toachievement of general education outcomes.

For additional information about the CLA and UW-La Crosse Results go to
http://www.uwlax.edu/provost/assessment/assess.htm and see the following**:**
• What is the CLA? Brief overview of UWL participation in the 2007-08 CLA
• 2007-2008 CLA Institutional Report for UW-La Crosse
• 2007-2008 CLA Technical Appendices for UW-La Crosse
• The CLA website at the Council for Aid to Education

Appendix A: CLA Task Types*

Performance Tasks
Each task requires students to use an integrated set of critical thinking, analytic reasoning, problem solving, and written communication skills to answer several open-ended questions about a hypothetical yet realistic situation. Students have access to a document library that includes material such as newspaper articles, photographs, memos, summaries of research reports, maps, tables, diagrams and interview transcripts. Students are instructed to use these materials in preparing their answers to the questions. They are given 90 minutes for the task.

Example: Introductory Material: You advise Pat Williams, the president of DynaTech, a company that makes precision electronic instruments and navigational equipment. Sally Evans, a member of DynaTech's sales force, recommended that DynaTech buy a small private plane (a SwiftAir 235) that she and other members of the sales force could use to visit customers. Pat was about to approve the purchase when there was an accident involving a SwiftAir 235. Your document library contains the following materials:

1.   Newspaper article about the accident
2.   Federal Accident Report on in-flight breakups in single-engine planes
3.   Internal Correspondence (Pat's e-mail to you & Sally's e-mail to Pat)
4.   Charts relating to SwiftAir's performance characteristics
5.   Excerpt from magazine article comparing SwiftAir 235 to similar planes
6.   Pictures and descriptions of SwiftAir Models 180 and 235

Sample Questions: Do the available data tend to support or refute the claim that the type of wing on the SwiftAir 235 leads to more in-flight breakups? What is the basis for your conclusion? What other factors might have contributed to the accident and should be taken into account? What is your preliminary recommendation about whether or not DynaTech should buy the plane and what is the basis for this recommendation?

Make an Argument
Presents an opinion on an issue and asks students to address this issue from any perspective they wish, so long as they provide relevant reasons and examples to explain and support their views. Students have 45 minutes to complete this essay.

Example: There is no such thing as "truth" in the media. The one true thing about the media is that it exists to entertain.

Critique an Argument
Asks students to evaluate an argument by discussing how well reasoned they find it to be (rather than simply agreeing or disagreeing with the position stated). Students have 30 minutes to complete this essay.

Example: A well respected professional journal with a readership that includes elementary school principals recently published the results of a two-year study on childhood obesity. (Obese individuals are usually considered to be those who are 20 percent above their recommended weight for their height and age.) This study sampled 50 schoolchildren, ages 5-11, from Smith Elementary School. A fast food restaurant opened near the school just before the study began. After two years, students who remained in the sample group were more likely to be overweight—relative to the national average. Based on this study, the principal of Jones Elementary School decided to confront her school's obesity problem by opposing any fast food restaurant openings near her school.

* From *2007-2008 CLA Technical Appendices*, Appendix D: Description of CLA Tasks and Scores

Appendix B: Combinations of Skills Used on CLA Tasks*

CLA results operate as a signaling tool of overall institutional performance on tasks that measure higher order skills holistically. However, the three types of CLA tasks—Performance, Make-an-Argument and Critique-an-Argument—differ slightly in the combination of skills necessary to perform well. Indeed, some schools score significantly lower on one type than on another. Examining performance across CLA task types can serve as an initial diagnostic exercise. Specifically, cases of performance Well Below Expected or Below Expected on a particular task type indicate that students are not demonstrating the expected level of skill (given their SAT scores) at:

Performance Tasks: Analyzing complex, realistic scenarios. Synthesizing information from multiple sources; recognizing conflicting evidence, weighing the credibility of different sources of evidence; identifying logical fallacies, interpreting data, tables, and figures correctly; drawing reasonable and logical inferences from the available information; developing sound conclusions based on all available evidence; and utilizing the most relevant and credible evidence available to justify their conclusion.

Make-an-Argument: Writing a persuasive, analytic essay to support a position on an issue. Establishing a thesis or a position on an issue; maintaining the thesis throughout the essay; supporting the thesis with relevant and persuasive examples (e.g., from personal experience, history, art, literature, pop culture, or current events); anticipating and countering opposing arguments to the position, fully developing ideas, examples, and arguments; crafting an overall response that generates interest, provokes thought, and persuades the reader; organizing the structure of the essay (e.g., paragraphing, ordering of ideas and sentences within paragraphs); employing transitions and varied sentence structure to maintain the flow of the argument; and utilizing sophisticated grammar and vocabulary.

Critique-an-Argument: Critiquing written arguments. Identifying a variety of logical flaws or fallacies in a specific argument; explaining how or why the logical flaws affect the conclusions in that argument; and presenting their critique in a written response that is a grammatically correct, organized, well-developed, logically sound, and neutral in tone.

* From *2007-2008 CLA Technical Appendices*, Appendix C: Examining Performance across Task Types